

Appendix C: Innovative vehicle design templates



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Proposed vehicle designs. **Not yet approved.**

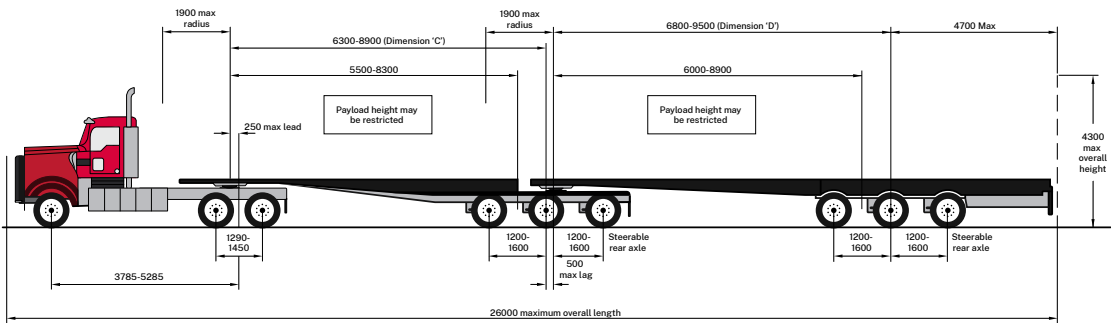
Note: Vehicle designs below are **indicative only**. Vehicle design templates will be made available to all operators with network access provisions attached as a deliverable of the Heavy Vehicle Access Policy.

Innovative multi-purpose combinations

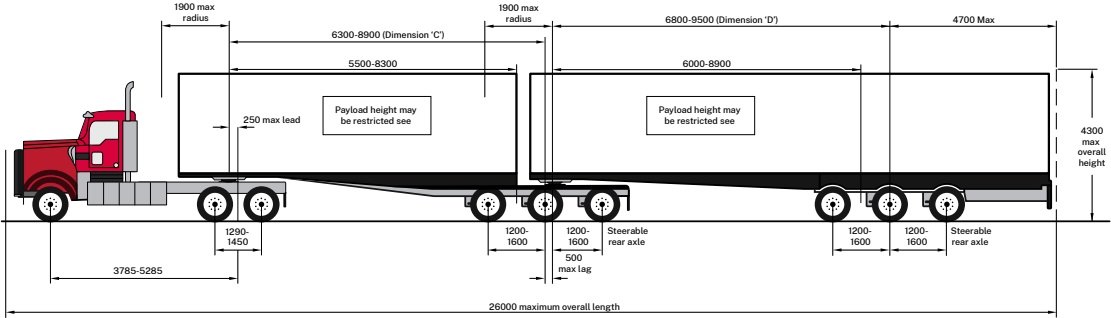
These vehicle designs are applicable to most commodity vehicle types except livestock and tankers. Examples of vehicle types with the same design are shown for the PBS Level 1 B-double vehicle below. Other vehicles in this category have a similar multi-purpose approach.

PBS Level 1 - 9-axle B-double

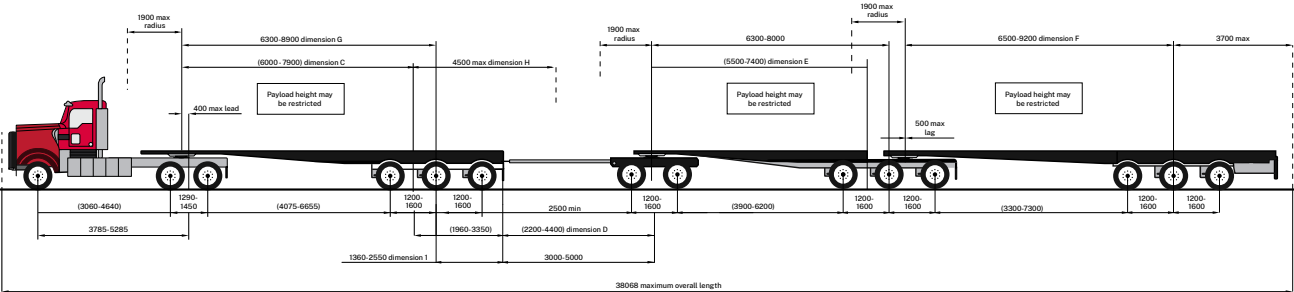
Flat top variant



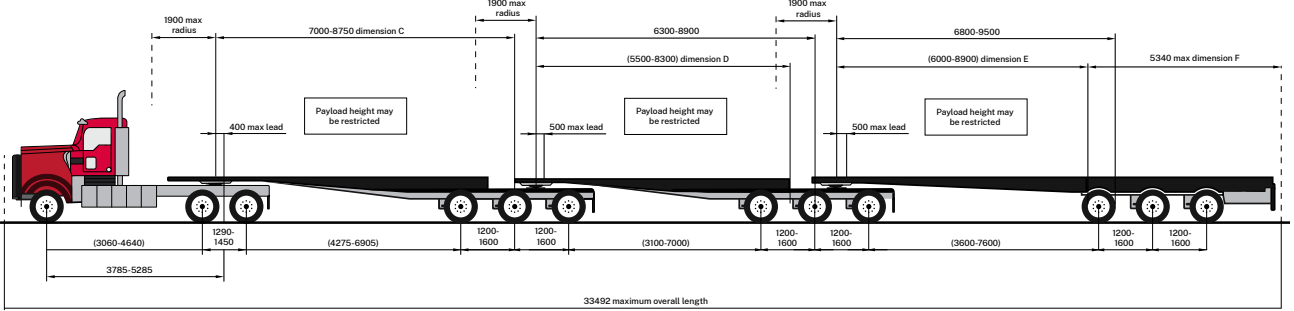
Bin variant



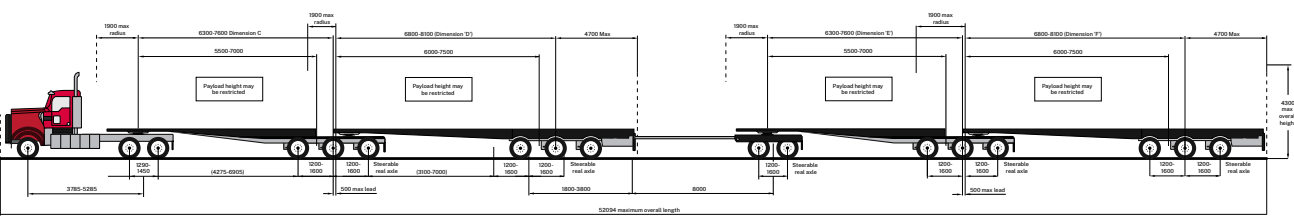
PBS Level 2 - AB-triple



PBS Level 2 - Modular B-triple



PBS Level 3 - BAB-quad



[illegible]

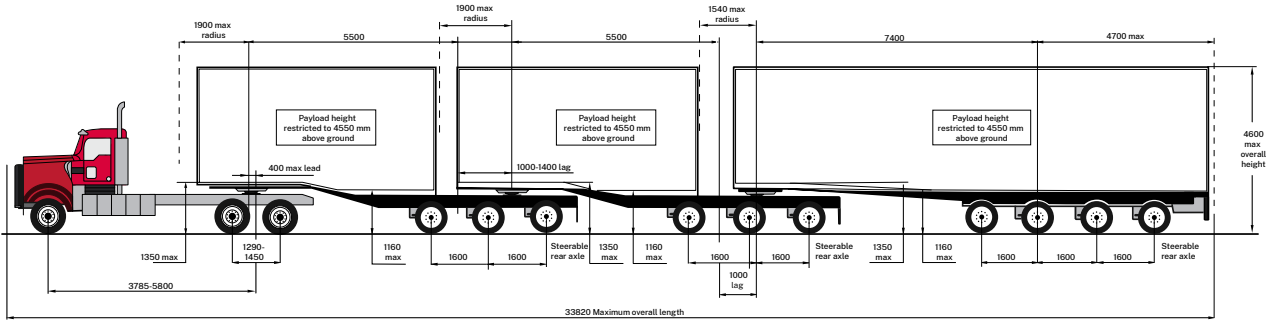
Diagram illustrating the maximum overall length of 45.43m for a truck and trailer combination. The truck has a wheelbase of 1290mm and a total length of 3785-5800mm. The trailer has a wheelbase of 14075-5195mm and a total length of 3800-4000mm. The diagram also shows the maximum height of 1900mm and the maximum load of 4000kg.

Diagram illustrating the dimensions of a 3-axle truck chassis. The diagram shows a red truck cab and a white trailer. Key dimensions are labeled:

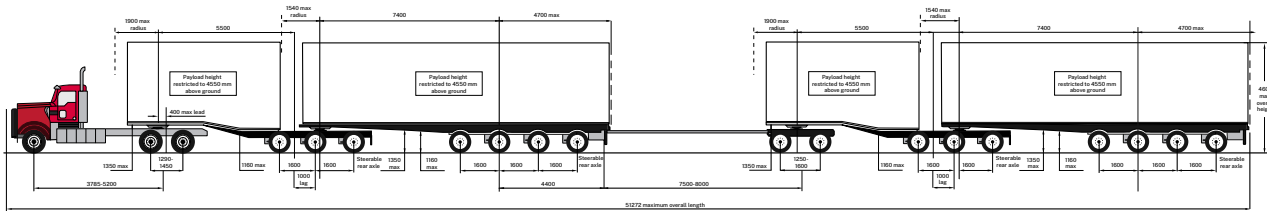
- 1900 max radius**: Dimension for the front overhang.
- 6500-7800**: Dimension for the first trailer section.
- 5500**: Dimension for the second trailer section.
- 1540 max radius**: Dimension for the rear overhang.
- 7400**: Dimension for the third trailer section.
- 4700 max**: Dimension for the fourth trailer section.
- 4600 max over height**: Dimension for the total height of the trailer.
- 400 max lead**: Dimension for the lead of the first trailer section.
- 200 max lead**: Dimension for the lead of the second trailer section.
- 1450 max**: Dimension for the front overhang.
- 1290-1450**: Dimension for the front overhang.
- 1200 max**: Dimension for the front overhang.
- 1200-1600**: Dimension for the front overhang.
- 1200-1600**: Dimension for the front overhang.
- 1350 max**: Dimension for the front overhang.
- 1160 max**: Dimension for the front overhang.
- 1600**: Dimension for the front overhang.
- 1600**: Dimension for the front overhang.
- 1350 max**: Dimension for the front overhang.
- 1160 max**: Dimension for the front overhang.
- 1600**: Dimension for the front overhang.
- 1600**: Dimension for the front overhang.
- 1600**: Dimension for the front overhang.
- 1000 lng**: Dimension for the front overhang.
- 3785-5800**: Dimension for the front overhang.
- 33065 maximum overall length**: Dimension for the maximum overall length.

PBS Level 2 - Modular B-triple (continued)

Variant 2



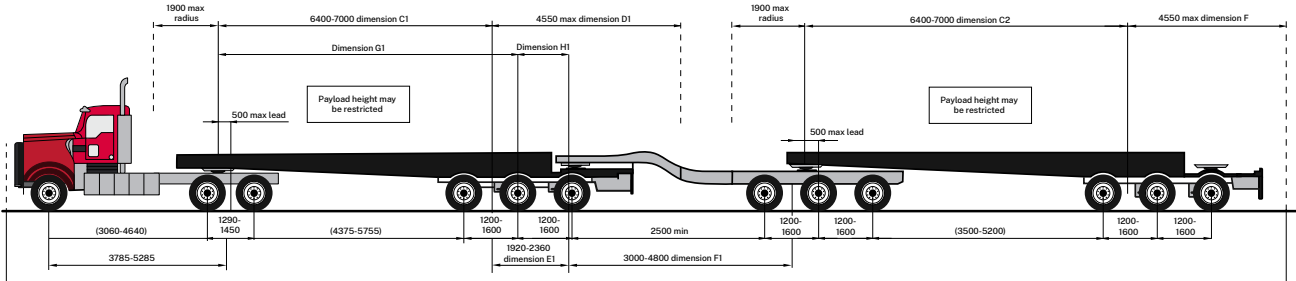
PBS Level 3 - BAB-quad



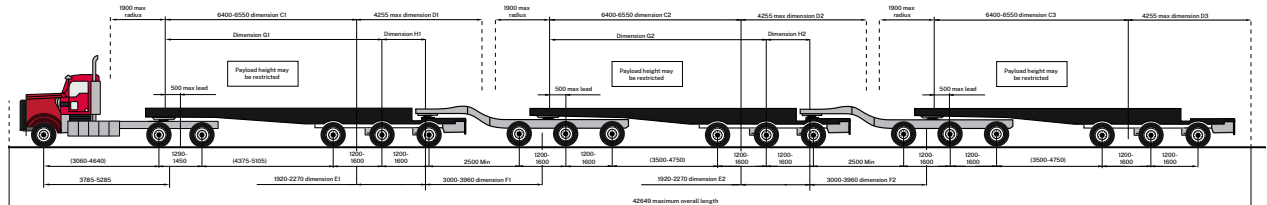
Super innovative vehicles

The following vehicles feature new trailer designs that can achieve further safety, sustainability and productivity, and performance improvements over existing trailers utilised on the NSW road network today.

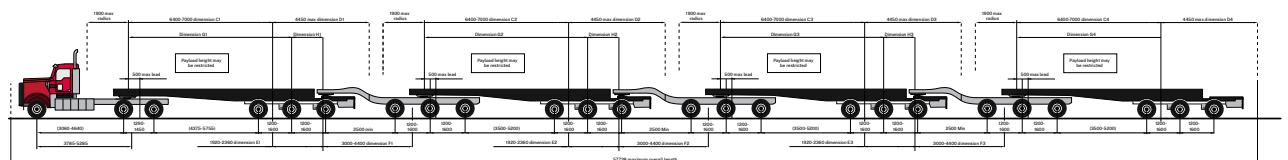
PBS Level 1 - A-double



PBS Level 2 - A-triple



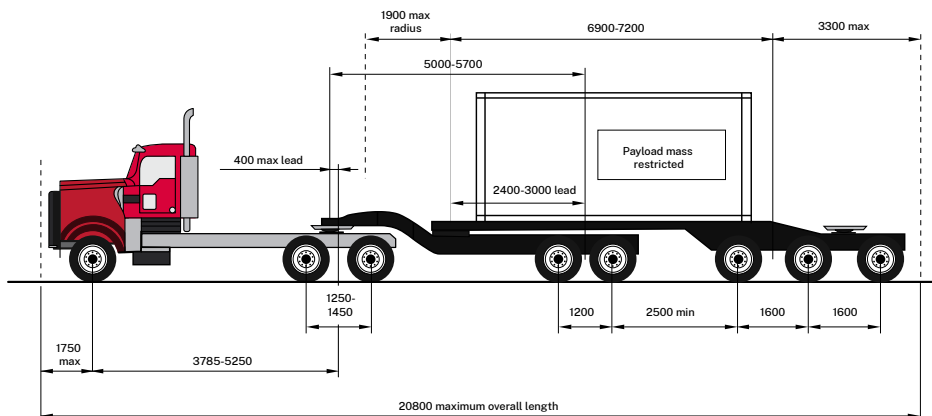
PBS Level 3 - A-quadruple



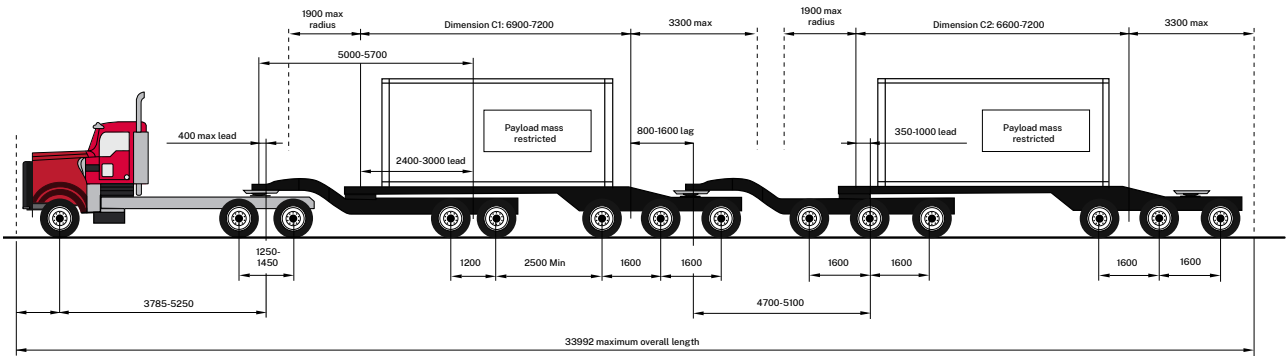
Intermodal vehicles

Intermodal vehicles have been developed for various levels of PBS. These vehicles can carry 20-foot containers at rail masses (up to 34 tonnes per container) without exceeding CML axle masses. They are ideal at improving the efficiency of the containerised grain task using rail. Not only do these vehicles meet PBS and carry rail mass containers on the road, they also operate at GML/CML axle masses which minimises impact on local road networks. Masses beyond CML are generally a significant inhibitor for access on local council roads. The intermodal vehicles are modular as well, meaning the trailers can be added or removed to shift between level 1, 2, 3 and 4 vehicles. Access for these vehicles, when travelling while loaded, will require a start or finish point at an intermodal site in the NSW Western Zone.

PBS Level 1 - Semi-trailer (Heavy container)



PBS Level 2 - A-double (Heavy container)



PBS Level 3 - A-triple (Heavy container)

